

ILLUMINATION UNIT EQUIPPED WITH AT LEAST ONE LED AS LIGHT SOURCE

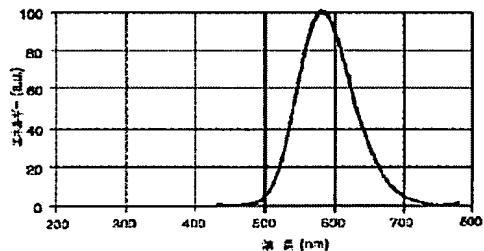
Patent number: JP2003124527
Publication date: 2003-04-25
Inventor: ELENS ANDRIES; KUMMER FRANZ; HUBER GUENTHER DIPL. ING.
Applicant: PATRA PATENT TREUHAND
Classification:
- **international:** H01L25/13; H01L33/00; H01L25/10; H01L33/00; (IPC1-7): H01L33/00; C09K11/08; C09K11/59; C09K11/62; C09K11/64; C09K11/80
- **European:** H01L25/13; H01L33/00B3B
Application number: JP20020206125 20020715
Priority number(s): DE20011033352 20010716

Also published as:
EP1278250 (A2)
US6657379 (B2)
US2003030368 (A1)
DE10133352 (A1)

[Report a data error here](#)

Abstract of JP2003124527

PROBLEM TO BE SOLVED: To provide an illumination unit which shows invariance even if operation temperature varies and has high color reproducibility and high efficiency. **SOLUTION:** The illumination unit which is equipped with at least one LED as a light source and is characterized in that the LED emits primary radiation in a range of 300 to 485 nm and a fluorescent body exposed to the primary radiation of the LED converts the radiation partially or completely into radiation of long wavelength performs the conversion by using the fluorescent body originating from a kind of Eu-activated SIALON which emits yellow-orange light of wavelength of peak illumination of 540 to 620 nm and the SIALON is represented as $Mp/2\text{ Sr}_{12-p-q}\text{ Al}_{p+q}\text{ O}_q\text{ N}_{16-q}\text{ :Eu}^{2+}$, where M is Ca alone or Ca combined with Sr or Mg, (q) is 0 to 2.5, and (p) is 0 to 3.



Data supplied from the [esp@cenet](#) database - Worldwide